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Radiation-sensitive mixture.

A radiation-sensitive mixture for use in the production of semiconductor elements, which has high sensitivity and high resolution, which can be developed by an aqueous alkaline solution, and which is based on a novel concept in that a stable acid latent image is controlled by using a radiation-decomposable base.

The mixture is characterized by comprising as essential components a) a binder which is insoluble in water but soluble in an aqueous alkaline solution; b¹) a compound having at least one bond which can be cleaved by an acid, or b²) a compound having at least one bond which is crosslinked with the compound a) by an acid; c) a compound which generates an acid when irradiated; and d) a basic iodonium compound.